

Claims

[c1] What is claimed is:

1. A transceiver module for a fiber optic communications system comprising:
 - a housing;
 - a connector for connecting with the housing;
 - an optical sub assembly (OSA) installed within the connector for receiving or emitting optical signals;
 - a printed circuit board (PCB) installed within the housing for processing photoelectric signals; and
 - a clipping device disposed within the housing for fixing the optical sub assembly so that the optical sub assembly is electrically connected with the printed circuit board.

[c2] 2. The transceiver module of claim 1 wherein the clipping device comprises a hook for inserting into an opening of the printed circuit board so that the printed circuit board is fixed within the clipping device.

[c3] 3. The transceiver module of claim 1 wherein the optical sub assembly comprises an optical emitter having a first end connected to an optical fiber so as to transmit optical signals to the optical fiber, and an optical receiver having a first end connected to the optical fiber so as to receive optical signals from the optical fiber.

[c4] 4. The transceiver module of claim 1 wherein the optical emitter and the optical receiver each comprise a second end having a plurality of pins disposed in guiding slots of the clipping device so as to electrically connect the printed circuit board.

[c5] 5. The transceiver module of claim 4 wherein the clipping device further comprises clamping arms for clamping the pins of the optical emitter and the optical receiver with the printed circuit board so as to fix the pins on the printed circuit board.

[c6] 6. The transceiver module of claim 4 wherein the pins are soldered or welded onto the printed circuit board.

[c7] 7.The transceiver module of claim 4 further comprising a clamping device having a clamping plate and a rod for inserting into a hole of the clipping device so as to clamp the printed circuit board between the plurality of pins and the clamping plate.

[c8] 8.The transceiver module of claim 1 wherein the clipping device is formed of plastic material.